

A NEW SPECIES AND A NEW RECORD SPECIES OF PHORA LATREILLE (DIPTERA, PHORIDAE) FROM CHINA

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Abstract A new species, *Phora furcularis* Liu et Wang, sp. nov., from Ningxia, China is described and illustrated. The species *P. edentata* Schmitz is reported for the first time from China. The type specimens are deposited in College of Biological and Environmental Engineering, Shenyang University.

Key words Phoridae, *Phora*, new species, new record, China.

The genus *Phora* Latreille is characterized, in particular, by the body of male adult appearing velvety black and the mid tibia with a dorsal row of several long bristles. Up to the present, 54 species have been recorded in the world. They are distributed in the Palearctic (41 species), Nearctic (14), Oriental (3), Afrotropical (1) and Neotropical Regions (Liu, 1994; Mostovski, 2002). In China, only seven species have been reported (Liu, 1994).

In the present paper, a new species, *Phora furcularis* sp. nov., is described and illustrated. The *P. edentata* Schmitz is reported for the first time from China. The methods and terminology are referred to Schmitz and Goto (1984). The type specimens are deposited in the College of Biological and Environmental Engineering of Shenyang University.

Phora furcularis Liu et Wang, sp. nov. (Figs. 1–9)

Male. Frons moderately wide, frontal index 0.28, slightly narrowed posteriorly, width at the level of upper fronto-orbital bristles $0.67\times$ that at supra-antennals. Upper interfrontal bristles $0.71\times$ as long as upper fronto-orbitals, ventral to upper fronto-orbitals; supra-antennal bristles $0.54\times$ upper interfrontals in length; frontal setulae rather sparse, bristly, as long as supra-antennals, arranged in two rows. Palpus with 4 short bristles.

Wing hyaline, very slightly tinged with grayish brown; vein R_{4+5} reddish brown, veins M_2 , M_3 and CuA_1 brown, vein A_1 pale yellow. Costal index 0.5; 1st costal sector slightly shorter than 2nd, costal sector index 0.94; vein M_2 and CuA_1 bisinuate; vein A_1 completely to wing margin; costal cilia $2.7-3.5\times$ as long as width of 2nd costal sector; axillary margin with 6 hairs. Wing length 2.5 mm, width 1.18 mm.

Legs black; fore leg with tip of femur, whole tibia and tarsus yellowish brown, tarsus very slightly

darkened. Fore tibia $0.97\times$ as long as 1st to 4th fore tarsomeres together; bearing a dorsal row of spine-like hairs; fore tarsus moderately dilated, narrower than tip of fore tibia, all tarsomeres longer than wide, relative length of fore tarsomeres approximately 31:16:16:14:13. Mid tibia with 1 anterior bristle and a dorsal row of 5 bristles. Hind tibia with 1 anterior bristle; ventroproximal prominence of hind femur indiscernible.

Male terminalia shining blackish brown. Lateral lobe of epandrium roughly rectangular, angulate at ventral corner. Right surstylus elongate ovate in lateral view, bearing sparse bristly hairs on distal submarginal portion. Left surstylus dorsoproximally separated from epandrium by a deep membranous incision, rounded on posteroventral margin, with distal margin pointed, greatly produced inwardly on dorso-inner margin to form two excavated processes as a Y-shaped ridge in lateral view, upper process elaboration orientated inwardly, which is sharply pointed on its posterodorsal corner as shown in Figs. 5–8, lower process somewhat drawn out posteriorly, bearing sparse short hairs on distal marginal portion. Right hypandrial lobe widely excavated on posterior 1/2 of ventromesal surface. Right process of right hypandrial lobe widened distally, constricted at base. Left process of right hypandrial lobe slender. Body length 3.2 mm.

Female. Unknown.

Holotype ♂, China, Mt. Liupan (2200 m), Ningxia, 27 June 2008, SU Li-Xin. Paratypes 4 ♂♂, same data as holotype.

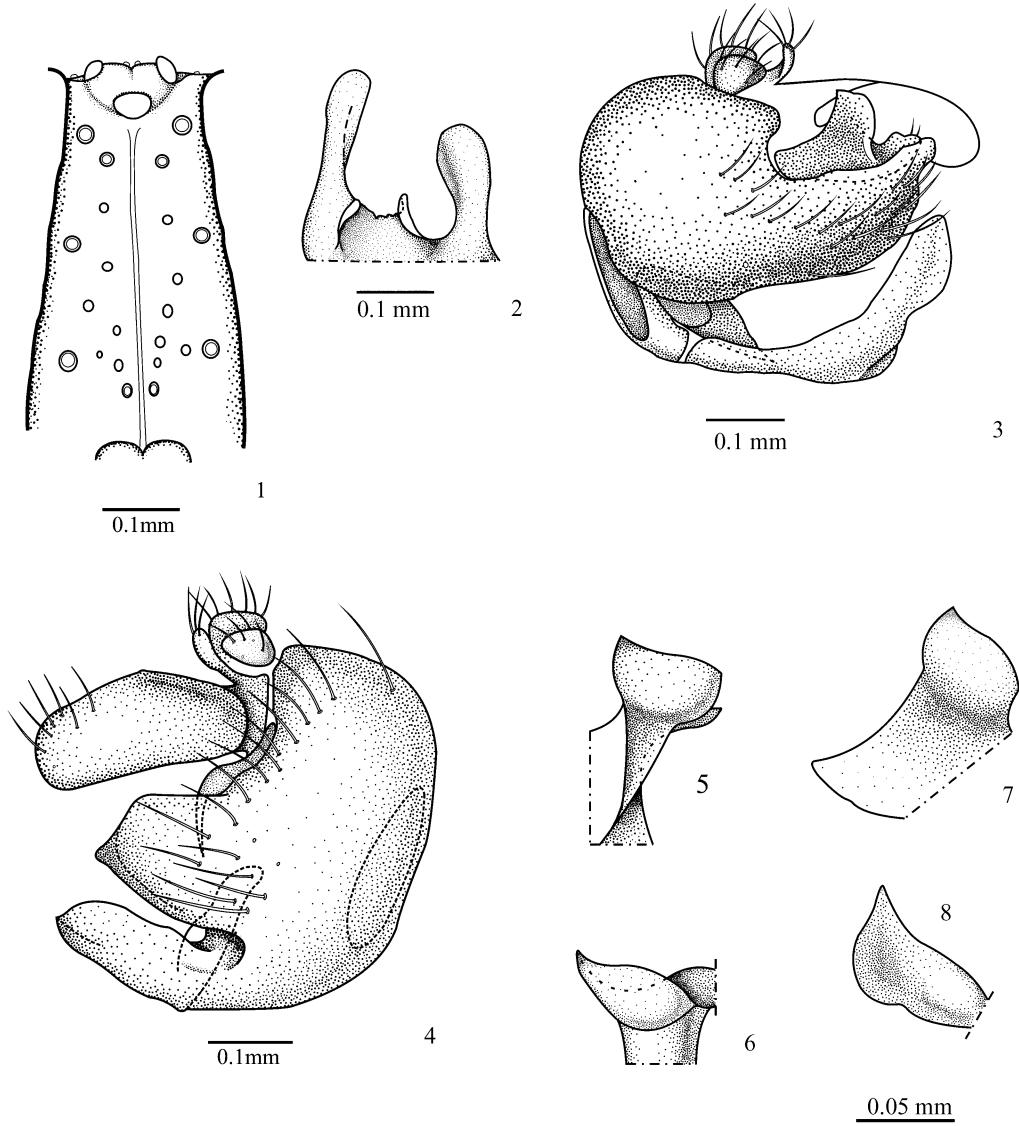
Remarks. This species is similar to *P. zherikhini* Mostovski, but differs from the latter in: 1) lateral lobe of epandrium without a hook-like elaboration; 2) frons slightly narrowed posteriorly; 3) left surstylus with a Y-shaped ridge in lateral view.

Etymology. The specific name refers to the

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Figs. 1-9. *Phom furcularis* Liu & Wang, sp. nov. 1. Frons. 2. Distal portion of right hypandrial lobe in ventral view. 3-4. Terminalia (left and right lateral view). 5-6. Upper process of left surstylus (anterior and dorsal view). 7-8. Upper process of left surstylus (left and right lateral view). 9. wing. Scale bars: 1-4= 0.1 mm; 5-9= 0.05 mm.

characteristic inner processes of the left surstylus.

Phora edentata Schmitz, 1920 New record to China

Phora edentata Schmitz, 1920, Jaarb. nat. Gen. Limb. IV: 121.

Male. Frons relatively narrow, frontal index 0.24, parallel-sided. Upper interfrontal bristles weak, $0.7 \times$ as long as upper fronto-orbitals, ventral to upper fronto-orbitals; supra-antennal bristles $0.7 \times$ upper interfrontals in length; frontal setulae short, about $1/2$ as long as supra-antennals, arranged in two rows. Palpus with 3-4 short bristles.

Wing hyaline, very slightly tinged with grayish brown. Costa moderately long, costal index 0.51; 1st costal sector slightly shorter than 2^{nd} , costal sector index 0.93; vein M_2 weakly bisinuate; vein CuA_1 bisinuate, distinctly curved on distal $1/3$; vein A_1 incomplete; costal cilia short, $2.4 \times$ as long as width of 2^{nd} costal sector; axillary margin with 3 hairs. Wing length 1.84 mm, width 0.92 mm.

Leg black; fore leg with tip of femur, tibia and tarsus brownish yellow, tarsus slightly darkened. Fore tibia as long as 1st to 4th fore tarsomeres together; fore tarsus moderately dilated, narrower than tip of fore tibia, relative lengths of fore tarsomeres approximately 20: 11: 10: 9: 9. Mid tibia with 1 anterior bristle and a dorsal row of 4 bristles. Hind tibia with 1 anterior bristle; ventro-proximal prominence of hind femur distinct, protruding about 0.04 mm, with distal margin rounded, bearing setulae on anterior surface.

Male terminalia shining blackish brown. Lateral lobe of epandrium with posterior margin emarginated, angulate at posterodorsal corner. Right surstylus elongate ovate in lateral view, bearing bristly hairs on distal $1/4$. Left surstylus dorsoproximally separated from epandrium by a deep membranous incision, small, narrow on

proximal portion, with distal margin rounded, greatly produced inwardly on dorso-inner margin to form a long process which is slightly tapering to rounded tip, bearing short hairs on distal marginal portion. Epandrial lobe well developed, parallel-sided, with distal margin weakly rounded. Right hypandrial lobe shallowly excavated on posterior ventromesal surface. Right process of right hypandrial lobe widened distally, constricted at base, with posterior margin nearly straight. Left process of right hypandrial slender, weakly twisted left. Body length 2.4 mm.

Female. Differing from male as follow: Frons wider, frontal index 0.35-0.36. Wing slightly tinged with grayish brown; costa shorter, costal index 0.45-0.47; costal sector index 0.94-1.00; axillary margin with 5 hairs. Wing length 1.70-1.88 mm, width 0.81-0.88 mm. Mid tibia with a dorsal row of 3-4 bristles. Body length 2.3-2.4 mm.

Specimens examined. 1 ♂, 2 ♀♀, China, Mt. Liupan (2 200 m), Ningxia, 27 June 2008, SU Li Xin.

Distribution. China; Japan, Europe.

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中国蚤蝇属一新种及一新纪录种记述 (双翅目, 蚤蝇科)

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摘 要 记述了我国蚤蝇科蚤蝇属 *Phora* 1 新种, 叉突蚤蝇 *Phora furcularis* Liu et Wang, sp. nov. 和 1 新纪录种, 缺齿蚤蝇 *P. edentata* Schmitz. *P. furcularis* 与 *P. zherikhini* Mostovski 相似,

关键词 双翅目, 蚤蝇科, 蚤蝇属, 新种, 新纪录, 中国.

中图分类号 Q969.451.8

但前者额向后渐狭, 生殖背板侧叶无钩状突, 且左侧尾叶后背部生有“Y”形脊。模式标本存于沈阳大学生物与环境工程学院。

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